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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,860	12/11/2003	Shinji Yamamoto	61282-050	8167

7590 04/05/2007
McDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

NEGRON, WANDA M

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/732,860

Applicant(s)

YAMAMOTO ET AL.

Examiner

Wanda M. Negrón

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 10-13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward (GB 2,284,318 A).**

5. Regarding **claim 1**, Ward discloses a flicker detecting method comprising the steps of calculating a lightness value for each of at least two lines in a frame of a video (see page 6, lines 11-18), and comparing the lightness value of at least two of said at least two lines (see page 6, lines 19-24).

6. Regarding **claim 2**, Ward discloses that, at the calculating step, the "integration of a whole line should average out the many level variations during that one line period" (see page 6, lines 16-19), which would have reasonably suggested to one of ordinary skill that each of the lightness values are calculated based on the pixel level of the entire line.

7. Regarding **claim 3**, Ward discloses in figures 1 and 2 that, while the camera is recording, the CCD lines are continuously inputted to the flicker detector, which would reasonably suggest to one having ordinary skill that the lightness values for all lines in the frame are calculated at the calculating step performed by integrated circuit 12.

8. Regarding **claims 4 and 5**, as mentioned in the discussion of claim 3 above, Ward discloses that the lightness values for all lines in the frame are calculated. Therefore, since the comparing step comes after the calculating step without discrimination of the input (see figure 2), it follows that the lightness values between all adjacent lines in the frame, which includes two adjacent lines of said at least two lines, are compared at the comparing step (see page 6, lines 19-28).

9. Regarding **claims 6, 7 and 8**, Ward discloses the step of extracting a fluctuation cycle, i.e. detecting large amplitude changes in lightness caused by flicker (see page 7, line 27 – page 8, line 4), from differences of the lightness values in a vertical scanning direction of the frame obtained from a result of the comparing step (see page 6, lines 25-28).

10. Regarding **claim 9**, Ward discloses that the extracting step includes taking differences from the result of the comparing step, i.e. outputting a positive pulse followed by a negative pulse indicating dark to light transitions, and vice versa (see page 6, line 25 – page 7, line 3), and counting a number of continuations of an identical code from the differences, i.e. detecting continuous time periods between consecutive positive pulses or consecutive negative pulses (see page 7, line 14-21).

11. Regarding **claim 10**, Ward discloses the step of deciding that a flicker is present from a result of the extracting step, i.e. determining the presence of a dark or light horizontal bar (see page 7, lines 4-6).

12. Regarding **claim 11**, Ward discloses that, at the deciding step, deciding that the flicker is present when the fluctuation cycle is within a predetermined frequency range, i.e. taking into account only large amplitude changes in lightness while discarding small differences in APL (see page 7, line 25 – page 8, line 4).

13. Regarding **claim 12**, Ward discloses that the frame is divided into a plurality of blocks, e.g. blocks comprising three consecutive lines in the frame (see page 6, lines 19-24), and, wherein at the comparing step, the lightness value, i.e. the APL, of at least

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two of said at least two lines are compared in each of the plurality of blocks (see page 6, lines 19-24).

14. Regarding **claim 13**, Ward discloses the step of extracting a fluctuation cycle, i.e. large amplitude changes in lightness caused by flicker (see page 7, line 27 – page 8, line 4), in each of the plurality of blocks from a result of the comparing step (see page 6, lines 25-28).

15. Regarding **claim 14**, Ward discloses the step of deciding that a flicker is present when a number of blocks in which the fluctuation cycle is within a predetermined frequency range is within a predetermined value, i.e. determining the presence of a dark or light horizontal bar (see page 7, lines 4-6) only taking into account large amplitude changes in lightness while discarding small differences in APL (see page 7, line 25 – page 8, line 4).

16. Apparatus **claims 15-28** are drawn to the apparatus corresponding to the method of using same as claimed in claims 1-14. Therefore, apparatus claims 15-28 correspond to method claims 1-14, and are rejected for the same reasons of anticipation as used above.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda M. Negrón whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wanda M. Negrón
March 27, 2007



DAVID OMETZ
SUPERVISORY PATENT EXAMINER